

MONMOUTH COUNTY

REFERENCE TIDE GAUGE - SANDY HOOK

The Sandy Hook tide gauge is located on the bay side of Sandy Hook.

Raritan Bay

For the Raritan Bay shoreline in Monmouth County there is only a small difference in the times of the high and low tides when compared to the Sandy Hook gauge. The times vary by 10 minutes or less along the length of the county's Raritan Bay shoreline.

There is a somewhat unique problem with the tidal streams in the county that drain north into Raritan Bay. Winds with a northerly component do not permit them to drain into the bay. Therefore, even after a "northeaster" has affected the region, the northwest winds on the back side of the system will continue to cause a buildup of water on the streams.

Oceanfront

The high and low tides on the oceanfront occur up to 45 minutes earlier than the high and low tides at the Sandy Hook gauge.

Data Acquisition

In order to access data from the Sandy Hook gauge, use the National Ocean Service web site at <http://tidesonline.nos.noaa.gov/> or the Advanced Hydrologic Prediction Service site at <http://water.weather.gov/ahps2/index.php?wfo=phi>.

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The tide heights from actual events referenced in the following table are those that were verified by the National Ocean Service.

In the table an asterisk (*) indicates that location experiences back bay type flooding. Being that the reference gauge is on Sandy Hook Bay, the tide level associated with that particular location may vary somewhat from event to event based on the number of tide cycles during which there is an onshore flow.

THE PERIOD OF RECORD FOR THE SANDY HOOK GAUGE BEGINS IN JANUARY 1910. PLEASE NOTE THAT THERE ARE GAPS WITHIN THE PERIOD OF RECORD DUE TO EQUIPMENT OUTAGES AND/OR DATA AVAILABILITY.

ALL HEIGHTS ARE IN MEAN LOWER LOW WATER (MLLW).

- 14.4 FT — October 29, 2012 (Post Tropical Cyclone Sandy). This is an estimated value. The tide gauge failed about an hour before the actual high water level occurred.
- 10.1 FT — September 12, 1960 (Hurricane Donna) / December 11, 1992.
- 9.8 FT — August 28, 2011 (Hurricane Irene).
- 9.7 FT — November 7, 1953.
- 9.4 FT — September 14, 1944 (Hurricane) / March 6, 1962.
- 9.0 FT — November 25, 1950 / March 13, 2010.
- 8.9 FT — January 23, 1966.
- 8.8 FT — November 12, 1968.
- 8.7 FT — MAJOR TIDAL FLOODING BEGINS.**
March 29, 1984 / March 13, 1993.
- 8.6 FT — September 27, 1985 (Hurricane Gloria) / January 2, 1987 / October 31, 1991.
- 8.5 FT — April 13, 1961.
- 8.3 FT — February 19, 1972 / March 19, 1996.
- 8.2 FT — October 18, 2009.
- 8.1 FT — January 31, 2006 / April 16, 2007.
- 8.0 FT — October 14, 1955 / December 26, 1969 / December 2, 1974 / April 16, 2011 / June 4, 2012.
- 7.9 FT — August 31, 1954 (Hurricane Carol) / December 22, 1972 / October 25, 1980 / February 24, 1998 / December 25, 2002 / November 14, 2009.
- 7.8 FT — October 14, 1977 / November 8, 1977 / March 3, 1994 / December 20, 1995 / January 29, 1998 / March 30, 2010.
- 7.7 FT — MODERATE TIDAL FLOODING BEGINS.**
March 20, 1958 / October 22, 1961 / November 10, 1962 / December 25, 1978 / December 3, 1986 / January 4, 1994 / December 13, 1996 / November 14, 1997 / January 3, 2003 / January 3, 2006 / February 12, 2006 / October 7, 2006 / May 12, 2008 / December 12, 2008 / May 17, 2011 / December 27, 2012 / January 3, 2014 / April 29, 2014.
Flooding reaches the intersection of Ocean Avenue (NJ Route 36) and River Street in Sea Bright*.
Flooding reaches the 1400 block of Ocean Avenue (NJ Route 36) in Sea Bright*.

- 7.5 FT — Flooding occurs along sections of NJ Route 35 in Aberdeen, Keyport and Hazlet as water backs up into tidal streams in the communities.
Flooding occurs along sections of NJ Route 36 in Keyport, Hazlet and Middletown Township as water backs up into tidal streams in the communities.
Flooding occurs along the access road to the Gateway National Recreation Area's Sandy Hook Unit.
- 7.3 FT — Flooding occurs on Ocean Avenue (NJ Route 36) in Sea Bright around the base of the Shrewsbury River Bridge (Monmouth County Route 520)*.
Flooding occurs around the bridge between Neptune City* and Shark River Hills (Neptune Township*).
- 7.0 FT — COASTAL FLOOD ADVISORY THRESHOLD.**
- 6.9 FT — Flooding begins in Aberdeen, Keyport (along West Front Street), Union Beach, Keansburg, Middletown Township and Highlands.
Flooding begins in Rumson*, Little Silver*, Oceanport*, Asbury Park, Ocean Grove, Bradley Beach, Avon, Belmar*, Spring Lake, Sea Girt and Brielle*.
Flooding occurs in the Shark River Hills section of Neptune Township*.
- 6.7 FT — MINOR TIDAL FLOODING BEGINS.**
Flooding begins in Sea Bright*, Monmouth Beach*, Long Branch* and Manasquan*.
- 2.0 FT — LOW WATER ADVISORY THRESHOLD.**
- 3.0 FT — March 7, 1939 / February 26, 1956 / January 28, 1963 / January 27, 1971 / December 17, 1972 / March 4, 1996.
- 3.1 FT — February 10, 1933 / December 20, 1934 / January 25, 1939 / March 3, 1950.
- 3.2 FT — December 26, 1966 / March 9, 2005.
- 3.3 FT — February 14, 1942 / December 3, 1942 / January 24, 1945 / February 15, 1946 / November 30, 1955 / February 25, 1967 / March 17, 1976 / March 16, 1980.
- 3.4 FT — January 31, 1966 / January 2, 1969 / December 22, 1976 / December 10, 1977.
- 3.5 FT — December 8, 1939 / March 19, 1941 / February 8, 1951 / March 28, 1955.
- 3.6 FT — March 24, 1940 / December 11, 1943 / December 1, 1944.
- 3.7 FT — February 10, 1947.
- 3.8 FT — March 11, 1933.
- 4.1 FT — January 6, 1959.
- 4.2 FT — January 24, 1936.
- 4.3 FT — December 31, 1962.
- 4.4 FT — January 10, 1978.
- 4.7 FT — February 2, 1976.